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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/676,409	ZHANG ET AL.				
		Examiner	Art Unit				
		Oluseye Iwarere	3609				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status		•					
1)⊠	1) Responsive to communication(s) filed on <u>01 October 2003</u> .						
	This action is FINAL . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
.—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)🖂	4) Claim(s) <u>1-19</u> is/are pending in the application.						
·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	5) Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers							
9)[The specification is objected to by the Examine	r.					
10)🖂	The drawing(s) filed on <u>01 October 2003</u> is/are:	a)⊠ accepted or b)□ objected	to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1.☐ Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
•							
Attachment(s)							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
	3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:							

DETAILED ACTION

1. This communication is a First Action Non-final on the merits. Claims 1-20 are pending and have been considered below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Arunapuram et al. (2002/0,019,759).

As per claim 1, Arunapuram et al. teaches, an apparatus comprising:
a demand order module including a set of products to be shipped to a target location
([0034]; via specifically, referring to FIG. 2, after shipping orders are received 201, a first manager module);

an order guideline module including a set of constraints for a shipment from one of a set of a source locations to the target location ([0034]; via the problem-solver ("PS") module 300 of FIG. 3, plans at step 202 optimal freight movements between a initial pick-up location and a final drop-off location);

a route determination module to select the set of source locations having the set of products based on a cost factor and a utilization of a capacity of a set of transports ([0034]; via finally, at step 204, a third manager module, the freight payment ("FP")

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module 500 of FIG. 5, accounts for incurred costs for the executed freight movements, allocates the costs to orders received in step 201);

and a processing device to execute the route determination module ([0034]; via at step 203, the optimal freight movements are planned in step 202 are executed and tracked by a second manager module, the execution ("EX") module 400 of FIG. 4).

As per claim 2, Arunapuram et al. teaches, further comprising:

a storage device to store at least one of the demand order module, order guideline module, and the route determination module ([0007]; via the parcel ID and its location information are then transmitted by the host computer to one or more web servers, each including a database for storing a record of the parcel ID's scanned at each location).

As per claim 3, Arunapuram et al. teaches, further comprising:

a loading module to simulate a loading of the shipment of the set of products into the set of transports ([0008]; via the information characterizing the shipment is stored in the modified postage meter machine).

As per claim 4, Arunapuram et al. teaches, a method comprising:

identifying a set of source locations having a set of desired resources for a target location ([0034]; via the problem-solver ("PS") module 300 of FIG. 3, plans

at step 202 optimal freight movements between a initial pick-up location and a final drop-off location).

prioritizing a set of shipping rule groups based on a cost factor associated with the set of source locations and the target location ([0055]; via a particularly advantageous feature of the present invention involves the use of priority routing rules in the PS database that enable a transportation planning manager to influence the creation of loads and freight movements when lowest cost is not the most important consideration);

and selecting a subset of the set of source locations and a subset of the shipping rule groups based on the cost factor and a utilization of a capacity of a set of transports ([0055]; via typically, after it identifies all potential suitable freight movements for each order, the PS logic identifies the lowest cost transportation solution).

As per claim 5, Arunapuram et al. teaches, wherein selecting comprises:

searching iteratively through the set of shipping rule groups in order of priority for a shipping solution ([0018]; via the decision making rules and information the problemsolver uses to make optional decisions regarding pending transportation orders derives from business parameters that a transportation planning manager establishes for the system and from carrier availability and rate table information provided by external or fleet carriers. The information provided by the transportation manager may include, for example, policies or operational requirements that his/or particular company follows.

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Using all of this information, the problem-solver performs various planning decisions before reaching an optimal transportation plan).

As per claim 6, Arunapuram et al. teaches, wherein selecting comprises:

simulating iteratively the fulfillment of each group of the set of shipping rules in priority order until the set of desired resources is loaded into the set of transportation units ([0056]); via Additionally, at step 601 the PS logic accepts rates for each carrier type, and each carrier within the carrier type).

As per Claim 7, Arunapuram et al. teaches, wherein the set of shipping rule groups includes a default group of shipping rules ([0057]; via These rates are specified in a plurality of tables which are stored in the PS database 402 for use during batch runs, such rate tables are stored therein for each carrier type).

As per claim 8, Arunapuram et al. teaches, wherein the utilization of the capacity of the set of transports is a maximum utilization ([0058]; via when the PS logic begins its batch run at step 603 to generate an optimal freight movement plan (for all orders received since its last batch run) it performs several sub-steps which are detailed in FIG. 7).

As per claim 9, Arunapuram et al. teaches, further comprising:

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altering a size of a shipment to utilize a maximum capacity of the set of transports ([0059]; via during a batch run, the problem-solver logic 301 first consolidates various orders and shipments into transportation loads at sub-step 701. Then, a determination is made at sub-step 702 for each load as to the best shipping mode).

As per claim 10, Arunapuram et al. teaches, an apparatus comprising:

a means for determining a set of source locations of a set of resources ([0054]; via define route planning rules, create templates that define legs for multiple leg routes and multiple mode routes (the entering of such templates, while done at step 601));

a means for ordering a set of shipping rule groups based on a cost of shipping to a target location from the set of source locations ([0059]; via the system uses various types of information including data detailing the required freight movements, tables itemizing resource availability and cost, operational requirements of the industry, and general company rules and policies entered by the company's transportation planning manager);

and a means for selecting a subset of shipping rule groups based on the cost of shipping the set of resources from a subset of the set of source locations to the target location and utilization of a set of transports ([0055]; via a particularly advantageous feature of the present invention involves the use of priority routing rules in the PS database that enable a transportation planning manager to influence the creation of loads and freight movements when lowest cost is not the most important consideration);

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FIG. 5).

As per claim 11, Arunapuram et al. teaches, further comprising:

a means for simulating the loading of the set of transports ([0120]; via invoices are
transferred from the carrier electronically, such as via EDI, the Web, or email, and
loaded into the FP module at sub-step 803 via the invoice interface 508 as shown in

As per claim 12, Arunapuram et al. teaches, wherein the set of shipping rule groups includes a default shipping rule group ([0054]; via transportation planning managers can, for example, by using the manager interface 404, define route planning rules, create templates that define legs for multiple leg routes and multiple mode routes (the entering of such templates, while done at step 601 prior to a batch run, will be discussed in detail below with respect to step 603).

As per claim 13, Arunapuram et al. teaches, further comprising:

a means for determining all source locations having the set of resources ([0034]; via the problem-solver ("PS") module 300 of FIG. 3, plans at step 202 optimal freight movements between a initial pick-up location and a final drop-off location).

As per claim 14, Arunapuram et al. teaches, a machine readable medium containing therein a set of instructions which when executed cause a machine to perform a set of operations comprising (pg 18, col. 1, lines 59 - 61; via program storage

device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for managing transportation operations for a plurality of orders):

identifying a set of source locations having a set of products for a target location (pg 18, col. 1, lines 64 - 65; via planning a freight movement between a initial pick-up location and a final drop-off location);

prioritizing a set of order guidelines based on a cost factor for shipping the set of products from the set of source locations to the target location (pg 18, col. 2, lines 6 -10; via wherein said planning step comprises the sub-steps of generating a plurality of potential freight movements to satisfy each order and identifying the lowest cost freight movement from said plurality of potential freight movements);

and determining a subset of order guidelines based on the cost factor and utilization of a capacity of a set of transports (pg 18, col. 2, lines 49 - 52; via wherein said accounting step comprises the sub-steps of receiving invoices from carriers for executed freight movements, allocating actual costs detailed in said invoices to orders).

As per claim 15, Arunapuram et al. teaches, the machine readable medium of claim 14, having further instructions stored therein, which when executed cause a machine to perform a set of operations, further comprising (pg 18, col. 1, lines 59 - 61; via program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for managing transportation operations for a plurality of orders):

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searching iteratively through the set of order guidelines in order of priority for a shipping solution (pg 18, col. 2, lines 13 - 15; via wherein said plurality of potential freight movements are of types selected from the group consisting of direct routes from origin to destination).

As per claim 16, Arunapuram et al. teaches, the machine readable medium of claim 14, wherein the set of order guidelines includes a default order guideline (pg 18, col. 2, lines 43 – 46; via wherein said status updates are used to automatically update records contained in an order database, said database being accessible by customers, carriers, and locations to review the status of select orders).

As per claim 17, Arunapuram et al. teaches, the machine readable medium of claim 14, wherein determining comprises:

simulating iteratively the fulfillment of each order guideline from the set of order guidelines in priority order until the set of resources is loaded into the set of transports (pg 18, col. 2, lines 64 – 65; via a problem-solver module, said problem-solver module being adapted to accept carrier services information from potential carriers and business preferences information from a network user).

As per claim 18, Arunapuram et al. teaches, wherein no product of the set of products is associated with more than one default order guideline ([0038]; via orders received through the order interface 306 have a single origin/destination pair).

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As per claim 19, Arunapuram et al. teaches, having further instructions stored therein, which when executed cause a machine to perform a set of operations, further comprising (pg. 18, col. 1, lines 59 - 61; via program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for managing transportation operations for a plurality of orders):

altering a size of a shipment to utilize a maximum capacity of the set of transports (pg. 19, col. 2, lines 3 - 7; via wherein said problem-solver constructs said optimal freight movements in batch runs, and wherein said batch runs comprise generating a plurality of potential freight movements to satisfy each order).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Peterkofsky et al. (2006/0,265,234), which discloses mission-specific vehicle capacity constraints in transportation planning, Scheer (7,212,976), which discloses a method for selecting a fulfillment plan for moving an item within an integrated supply chain, Scheer (2002/0,143,669), which discloses a method for managing inventory within an integrated supply chain, Aoyama et al. (2005/0,261,954), which discloses a method for managing inventory within an integrated supply chain, Aoyama et al. (2004/0,172,341), which discloses a system and method for distribution chain management, Lu et al.(5,450,317), which discloses a method and system for optimized logistics planning, Yang (2004/0,153,370), which discloses a method and

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apparatus for facilitating a search for a pick up location, Katz et al. (2002/0,178,077), which discloses a method for automatically invoking a software module in response to an internal or external event affecting the procurement of an item, Zivin (2007/0,150,369) a method and system for determining the optimal travel route by which customers can purchase local goods at the lowest total cost, which discloses, Vanduyne (2004/0,260,587), which discloses a distribution network and convertible packaging system and von Helmolt et al. (2007/0,129,984) which discloses systems and methods for consolidating order processing items.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oluseye Iwarere whose telephone number is (571) 270-5112. The examiner can normally be reached on Monday to Thursday 7:30am to 5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on (571) 272-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have guestions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SUPERVISORY PATENT EXAMINER

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